Attorney Docket No.: 392902

REMARKS

Claims 1-46 are pending in the application. No amendments to the claims have been made in this response.

Claim rejections—35 U.S.C. §103(a)

Claims 1-46 stand rejected under 35 U.S.C. §103(a) over United States Patent Application Publication (U.S. 2002/0107724) by Openshaw II et al., in view of Miller (article, *The impact of candidate name order on election outcomes*). The Examiner uses Openshaw II et al. to show an electronic voting system that performs ballot rotation. Miller is said to show ballot rotation in precincts using electronic voting systems, where ballot images are produced, and wherein the rotation produces substantially equal statistical fairness. Applicant respectfully disagrees.

Independent Claims 1, 24 and 43 distinguish the cited art by reciting details on how the ballot rotation engine operates to achieve substantial fairness by ballot rotation at different levels. The Examiner recognizes that Openshaw II et al. does not disclose ballot images or achievement of substantially equal statistic fairness in rotation. See page 3 of the Office Action. However, the Examiner appears to be using Miller to supply the elements of achieving substantial fairness that are missing in Openshaw. Applicant respectfully submits that the combinatoni of references does not teach or suggest achievement of substantial fairness as presently claimed.

The instant application claims ballot rotation on demand to achieve "substantially equal statistical fairness" which means each candidate has a equal or near equal chance of being listed in the first place on the ballots. This may occur within a precinct, across the precincts or across the entire election jurisdiction. The Examiner insists that Miller teaches and suggests "rotation of a ballot to ensure that each candidate is first an equal number of times." See page 14 of the instant Office Action. However, the Examiner has not fully considered the methodology to assign ballot orders as disclosed in Miller, which is inherently different from the methodology tha tis presently claimed. Even Miller admits that "this sequential assignment method is clearly not the same as random assignment." Indeed, the sequential assignment as taught in Miller does

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not ensure that each candidate has an equal or near equal chance of being listed in the first place on any ballot.

More specifically, Miller develops a series of different name orders beginning first with an alphabetical order of all candidates. See Miller et al., page 298, last paragraph. Miller also teaches establishing a list of the precincts. *Id.* Miller assigns the first name order to the first listed precinct and then rotates the candidates' orders and assigns the resultant second order to the second listed precinct. *Id.* This ballot assignment process is repeated "until every precinct had been assigned to a name order." See Miller et al., page 298 last paragraph continued on page 299 first paragraph. Miller further states that "[t]he number of name orders created therefore equaled the number of candidates in the race. See Miller et al., page 298, last paragraph. Because the number of precincts may differ from the number of candidates, the number of precincts may also differ from the number of name orders.

Under Miller, two scenarios may occur during the process of assigning name orders to the precincts. In the first, the number of precincts is smaller than the number of name orders. Because Miller's ballot assignment process is repeated "until every precinct had been assigned to a name order," the process will be stopped before all name orders have been assigned. See Miller et al., page 298 last paragraph continued on page 299 first paragraph. Since each candidate is listed first in one and only one name order, it follows that not all candidates are listed first on the ballots an equal number of times across the precincts.

Under the second scenario, if the number of precincts equals or is greater than the number of name orders, some precincts will be assigned to the same name order. Under these circumstances, unless the number of precincts equals or is a multiple of the number of name orders, some name orders will necessarily be assigned to more precincts than other name orders. Thus, this methodology inherently places some candidates first on the ballots more times than other candidates across the different precincts.

Miller does not distinguish between these two scenarios, and even if it did, one of ordinary skills in the art would not know how to utilize the teaching of Miller to achieve the substantial statistical fairness as presently claimed. This is the sequential assignment of ballot orders is inherently different from the random assignment in both operational logistics and statistical effects. The instant application claims achieving "substantially equal statistical

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fairness" which means each candidate has a equal or near equal chance of being listed in the first place of the ballots, either within a precinct, across the precincts or even across the entire election jurisdiction. By contrast, Miller does not teach achieving statistical fairness within a precinct or across the entire election jurisdiction, and the only discussion regarding statistical fairness across precincts falls short of teaching one of ordinary skills to achieve the substantial statistical fairness as presently claimed. Thus, the combination of Openshaw II et al. and Miller et al. does not render the present claims obvious. Withdrawal of the 103(a) rejections is respectfully requested.

Based upon the foregoing discussion, Applicant's attorney respectfully solicits a notice of allowance and earnestly requests the Examiner to telephone if a conversation would expedite prosecution. Although Applicant believes that no fees are due, the Office is authorized to charge any additionally required fees to deposit account 12-0600.

Respectfully submitted,

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